



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

646.3411

Job Sheet 168234



Part No: 646.3411

Job Qty: 6 ea

Part Name: RH Wiper Deflector



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/13/17

Job Tracking No:

Due Date: 12/1/17

Created By: Linda Lacelle

Type: Stock

Description:

Note: DWG REV N/C SHEET 1 IPP REV:A NEW ISSUE 13/02/21 JFS VERIFY BY: JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	6 Ea	11/30/17	11/30/17	0.00	0.00	Start Up Machining		Kr 17-12-30
100	Bandsaw	6 pcs	11/30/17	11/30/17	0.00	0.00	Bandsaw1		Kr 17-12-30
110	CNC Vertical Machining	6 pcs	11/30/17	11/30/17	0.00	10.21	HAAS 1		Kr 17-12-30
120	QC	6 pcs	11/30/17	11/30/17	0.00	0.00	QC2		Kr 17-12-30
130	QC	6 pcs	11/30/17	11/30/17	0.00	0.00	QC8		De 18-01-10
131	HandFinish	6 pcs	12/1/17	12/1/17	0.00	0.41	HandFinish4		
140	Outsource	6 pcs	12/1/17	12/1/17	0.00	0.00	Outsource4		At 18/02/07
150	Packaging	6 pcs	12/1/17	12/1/17	0.00	0.00	Packaging2		At 18/02/07
155	QC	6 pcs	12/1/17	12/1/17	0.00	0.00	QC5		38 FEB 08 2018
180	Packaging	6 pcs	12/1/17	12/1/17	0.00	0.00	Packaging3	CCR010	82c
190	QC21-SA	6 Ea	12/1/17	12/1/17	0.00	0.00	QC21		

Part Op 100 - Cut Blank at 7.125"

Descriptions: 110 - 1-Machine per folio FB151 DWG REV: N/C FOLIO REV: AA 2- deburr and break all sharp edges

131 - CLEAN AND REMOVE ALL PART MARKING

140 - Issue P/O to ATG : 035842 1- Black Anodize as per Dwg 646.3400 2- PRIME AS PER DWG, SEE NOTE #2

Certification of Conformity is required

180 - ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***

JAN 22 2017

JAN 22 2018

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	M7075T6S4.000X3.000	4	0	0	0

Part Specifications

Specifications could not be found.

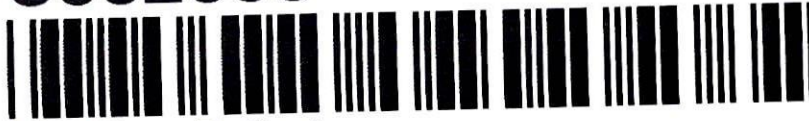
Plex 11/14/17 6:50 AM dart.boucher.sylvie

FM 138202-1
5032572

DART
AEROSPACE
S032533

Dart Aerospace Ltd.

1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



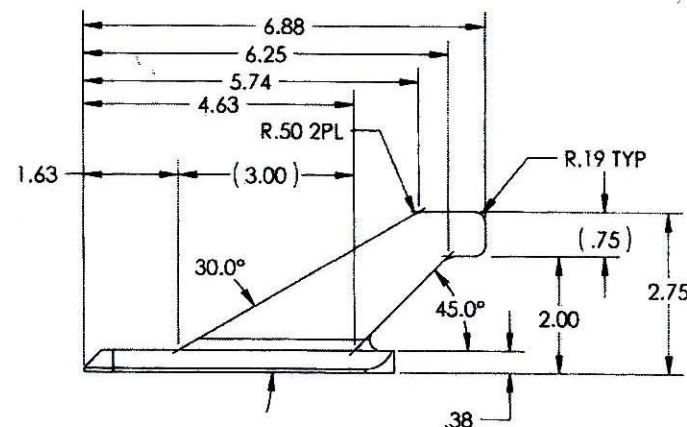
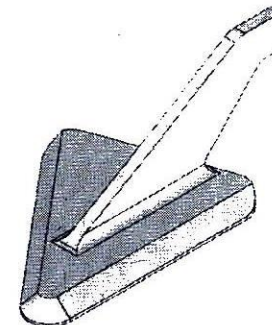
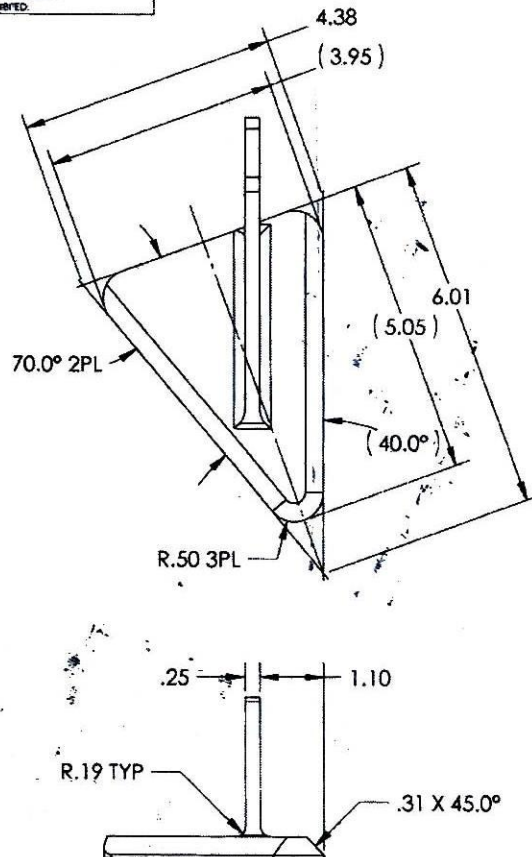
RH Wiper Deflector

PART NO: 646.3411
Original Serial #: S032533
Revision:
Operation: Start up Operation
Change No:

01/16/18
Job No: 168234

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



NOTES:

- MATERIAL: ALUMINUM 7075-T651 AMS-QQ-A-250/12
- FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; CARDINAL 4860-50 PRETREATMENT PRIMER PRIME IAW MIL-P-23377J TYPE I CLASS N
- DEBURR AND BREAK ALL SHARP EDGES
- IDENTIFY IAW MPP-120

646.3410 SHOWN
646.3411 OPPOSITE

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER

168234

DAS
30
9-89

NOV 16 2017

		646.3411	RH WIPER DEFLECTOR	△	△
		646.3410	LH WIPER DEFLECTOR		
	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
QTY	PARTS LIST				
NEXT ASSY IS	646.4000		ORIGINAL DESIGNED BY: J. H. H. CHECKED BY: P. H. H. V. C. DRAWING APPROVAL: P. H. H. V. C. DATE: 10/1/89		
			APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300		
			WIPER DEFLECTOR		
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS: ±.03 3 PLACE DECIMALS: ±.010 ANGLES: .5°		REV. 8 07/12/86 646.3400 SCALE: NONE SHEET 1 OF 1		

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
							Lead hand / Supervisor Approval Verification																		
							QC / QA Coordinator Approval																		
Root Cause <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"> Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ </td> <td style="width: 50%;"> No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ </td> </tr> </table>		Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	FAULT CATEGORY <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"> Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ </td> <td style="width: 33%;"> Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ </td> <td style="width: 33%;"> Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ </td> <td style="width: 33%;"> Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐ </td> </tr> </table>						Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐												
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OTHER : _____																									

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038842

Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalonde, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO038842

PO Date: 1/22/18

Due Date: 2/2/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Baker, Diane
dbaker@dartaero.com

Via: Ground

Pytm Terms: Net 30

Freight Terms:

Special Comments:

E-MAILED
JAN 30 2018

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
①	170696	D5069-1-Rework	Hardpoint Adapter ISSUE P/O: _____ TO ATG ANODIZE BLACK AS PER DWG D5069 REV. B	Firmed	2/2/18	4 pcs	0 pcs	4 pcs	\$9.39/pcs	\$37.56
Line Item Note: RUSH RUSH !!!!! See other PO										
②	170700	D5553-1-Rework	Bracket ISSUE P/O: _____ TO ATG ANODIZE BLACK AS PER DWG D5553 REV. A	Firmed	2/2/18	4 pcs	0 pcs	4 pcs	\$9.39/pcs	\$37.56
Line Item Note: RUSH RUSH !!!										
③	168270	646.9812	Lower Cutter Deflector Issue P/O to ATG : Hard Anodize, Color Black and Prime as Per Dwg 646.9800 Rev. A	Firmed	2/2/18	6 pcs	0 pcs	6 pcs	\$20.64/pcs	\$123.84
6x AT 18/02/07										
④	168234	646.3411	RH Wiper Deflector Issue P/O to ATG : 1- Black Anodize as per Dwg 646.3400 2- PRIME AS PER DWG, SEE NOTE #2 Certification of Comformity is required	Firmed	2/2/18	6 pcs	0 pcs	6 pcs	\$13.14/pcs	\$78.84
5x AT 18/02/07										
⑤	168233	646.3410	LH Wiper Deflector Issue P/O to ATG : 1- Hard Anodize, Color Black and Prime as per	Firmed	2/2/18	2 pcs	0 pcs	2 pcs	\$13.14/pcs	\$26.28
2x AT 18/02/07										



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

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PURCHASE ORDER PO038842

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6	170243	RB877528-4-3	Dwg 646.3400 Handle Issue P/O to ATG: ANODIZE COLOR BLACK, AS PER DWG RB877528-4-3 REV. 3	Firmed	2/2/18	4 pcs	0 pcs	4 pcs	\$7.24/pcs	\$28.96
7	170103	RB T102103-5	Retainer -Issue P/O to ATG: ANODIZE COLOR CLEAR, PER IAW MIL- A-8625F TYPE 2 CLASS 1 WATER SEAL	Firmed	2/2/18	20 pcs	0 pcs	20 pcs	\$7.24/pcs	\$144.80
8	170304	D2348 <i>see also 10</i>	Wearplate (Key Way) Issue P/O: Black Anodize per Dwg D2348 Rev. C	Firmed	2/2/18	20 pcs	0 pcs	20 pcs	\$3.39/pcs	\$67.80
9	170385	RBD29905-15	Center Plate -Issue P/O to ATG : PO -ANODIZE COLOR RED, PER IAW MIL-A- 8625 TYPE-2 CLASS-2, Water sealant	Firmed	2/2/18	12 pcs	0 pcs	12 pcs	\$10.78/pcs	\$129.36
10	168296	647.1816	Support LH ISSUE P/O: HARD ANODIZE, COLOR BLACK AND PRIME AS PER DWG 647.1800 REV. A	Firmed	2/2/18	4 pcs	0 pcs	4 pcs	\$14.14/pcs	\$56.56
11	165054	RBT400228M-3	Cylinder -Issue P/O to ATG: PO -ANODIZE COLOR RED, PER IAW MIL-A- 8625 TYPE-2 CLASS-2 AS PER DWG RBT400228M-3 REV. 1	Firmed	2/2/18	2 pcs	0 pcs	2 pcs	\$10.78/pcs	\$21.56
12	169805	RBW6505G00831- 3G-25	Mount Plate -Issue P/O to ATG: -ANODIZE COLOR CLEAR, PER IAW MIL- A-8625F TYPE 2 CLASS 1, Water sealant AS PER DWG RBW6505G00831-3G- 25 REV. 2	Firmed	2/2/18	2 pcs	0 pcs	2 pcs	\$7.24/pcs	\$14.48
13	169323	RBT400228M-1		Firmed	2/2/18	4 pcs	0 pcs	4 pcs	\$10.78/pcs	\$43.12



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 914571

Date: 05-Feb-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
3 ea	Part: 647.1816 Support LH Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22413 PO: PO038842 Line: 10	Rev: A	
6 ea	Part: 646.3411 RH Wiper Deflector Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22407 PO: PO038842 Line: 4	Rev: NC	
2 ea	Part: 646.3410 LH Wiper Deflector Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22408 PO: PO038842 Line: 5	Rev:	
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>5/2/18</u> Certified Signature: <u>[Signature]</u> Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of Made in Canada.			



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 914571

Date: 05-Feb-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms

Ship Via

OUR TRUCK

Quantity

Description

receipt.

Made in Canada